HT1 Series

Humidity/Temp Recessed/Wall



2% and 3% RH accuracy options
Universal analog output provides 0-5,V, 0-10V, 2-wire or 3-wire 4-20mA
Thermistor outputs for temperature optional
Optional LCD display

DESCRIPTION

The new Senva HT1 Series comes in our newly engineered enclosure making it the most attractive and quickest-installation humidity sensor on the market. Designed with a universal analog output and a variety of thermistor options allows flexibility on-site. It mounts easily in any junction box or it can be unobtrusively mounted directly to drywall using Senva's built-in drywall clamps. Save installation time and energy costs with this versatile product.

APPLICATIONS

- Facilitating compliance with ASHRAE 62.1 standard for air quality
- Indoor air comfort and control in HVAC systems
- Maintain healthy air quality, minimize mold and other contaminants
- Museums, hopsitals and other critical environments
- Offices, conference rooms, and public assembly areas
- Industrial process control environments



Attachable dry wall clamps for easy retrofit installation



Optional "Wall" version for surface-mount applications



Tamper proof push-in lock tabs - great for schools!



Meets Buy American Act Certification

FEATURES

- Fast and attractive installation: mounts easily in standard wall recepticals or order the surface-mount version
- Low profile installation is ideal for schools and other harsh environments
- Innovative drywall clamps allow unobtrusive and secure mounting without a junction box
- Ideal for schools and institutional environments
- Field calibration with LED or LCD allows easy adjustment of calibrated RH value as needed to maintain certification
- On-board temperature compensation for RH. Eliminates temperature coefficient errors and achieves an excellent measurement accuracy as well as high repeatability and offset stability.

ORDERING

HT1 [ ] - [ ] [ ] [U] [ ]

Enclosure
R = Recessed Wall
W = Surface Wall

Accuracy
2= 2%
3= 3%
N= 2%/ with NIST Cert.

Temperature
A = None
B = Transmitter*
C = 100PtRTD
D = 1000PtRTD
E = 10K Type 2
F = 10K Type 3
G = 10K W/ 11K
H = 3K
I = 2K2
J = 1K8
K = 20K
L = 100K
M = NTC

Output
U= Universal (4-20mA, 0-5V,0-10V) 2 or 3-Wire Connection

Display (LCD)
X= None
D=Display

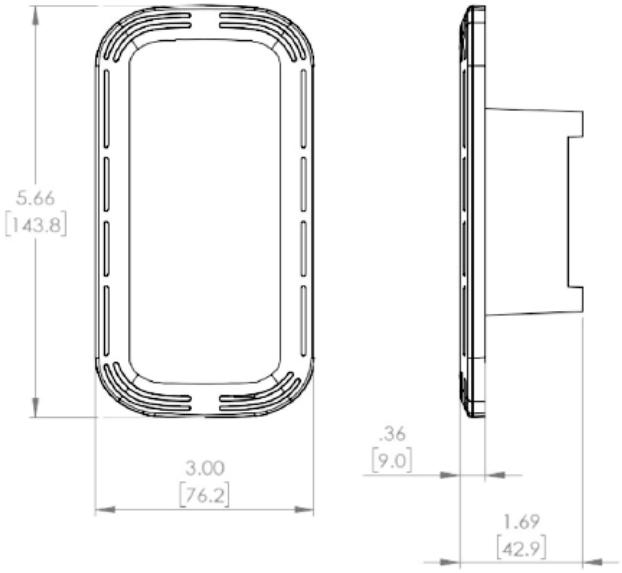
* Order B=transmitter to display temperature reading; thermistor and RTD options will not display temperature on LCD

Replacement Sensors Part # Examples:

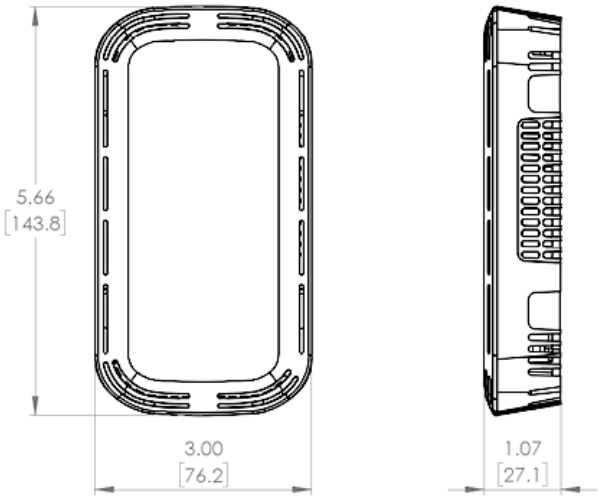
HTW - 2A	2%, Xmtr or No Temp, HT1W/R & AQ2W	HTW - 3A 3%, No Temp or Transmiter, HT1W/R & AQ2W
HTW - 2C	2%, 100Pt RTD, HT1W/R & AQ2W	HTW - 3C 3%, 100Pt RTD, HT1W/R & AQ2W
HTW - 2D	2%, 1000Pt RTD, HT1W/R & AQ2W	HTW - 3D 3%, 1000Pt RTD, HT1W/R & AQ2W
HTW - 2E	2%, 10K Type 2, HT1W/R & AQ2W	HTW - 3E 2%, 10K Type 2, HT1W/R & AQ2W
HTW - 2F	2%, 10K Type 3, HT1W/R & AQ2W	HTW - 3F 3%, 10K Type 3, HT1W/R & AQ2W
HTW - 2K	2%, 20K, HT1W/R & AQ2W	HTW - 3K 3%, 20K, HT1W/R & AQ2W
HTW - NA	2% NIST, Xmtr or No Temp, HT1W/R & AQ2W	
HTW - ND	2% NIST, 1000Pt RTD, HT1W/R & AQ2W	

DIMENSIONS

CT1R



CT1W



Warning: The datasheet is designed for reference only. Refer to installation instructions that accompany the product and heed all safety instructions. Product improvement is a continuing process at Senva. Changes may occur to products without prior notice.

SPECIFICATIONS		
Power Supply		12-30VDC/24VAC (1), 100mA max.
Outputs	RH% and Temperature	3-wire 0-5, 10V (4), or 4-20mA, 2-wire 4-20mA(selectable)
Output scaling	RH%	0-100% RH
	Temperature	50-95° F (10-35° C) or 32-122°F (0-50°C)
Thermistor Options		Yes, see ordering table
Media filter		PTFE membrane, IP54 protection
Relative Humidity	Accuracy	2% models: ±2% max 0 to 100% RH 3% models: ±3% max 0 to 100% RH
	Resolution	0.01%RH
	Hysteresis	±0.8%RH
	Non-Linearity	factory linearized <1%RH
	Temperature coefficient	fully compensated by on-board temp sensor
	Response time (2)	8s
	Output update rate	0.5s
	Operating range	0 to 100%RH (non-condensing)
	Long term drift	<0.25%RH per year
	Normal Operating conditions (3)	41 to 140°F (5 to 60°C) @ 20 to 80%RH
Temperature	Accuracy	2% models, <±1° C; 0.5° C typ @ 25°C 3% models, <±2° C; 0.5° C typ @ 25°C
	Resolution	0.01° C
	Repeatability	0.04° C
	Response time (2)	2s
	Temperature Scaling	50-95°F (10-35° C)
	Output update rate	0.5s
	Operating range	-40° C to 140°F (-40 to 60°C)
Environmental	Enclosure Rating	IP20/NEMA 1
	Unit Temp Rating	-40° C to 158°F (-40 to 70°C)
Compliance	Agency	CE, RoHS

1. One side of transformer, secondary is connected to signal common. Dedicated transformer is recommended.
2. Time for reaching 63% of reading at 25° C and 1 m/s airflow.
3. Long term exposures to conditions outside normal range at high humidity may temporarily offset the RH reading (+3%RH after 60 hours).
4. 15-30VDC/24VAC power supply voltage required for 10 volt output. Power consumption 100mA max AC, 50mA Max DC

** Product improvement is a continual process at Senva and product features and specification may change without prior notice. Refer to instructions that accompany the product for installation and wiring.*